

REMARKS

Claims 1 to 13 and 21 to 23 remain in the present application. Claims 21 to 23 are new. Claims 14 to 20 have been canceled without prejudice. There is support in the specification, claims and drawings for the amendments to the claims and the new claims. Many of the amendments to the claims are of an editorial nature so as to clarify the meaning of the claims.

Reconsideration of the Examiner's decisions and reexamination of this application are respectfully requested.

Restriction requirement:

The finality of the restriction requirement is acknowledged.

Information Disclosure Statement:

It would appear from the Examiner's remarks herein that the Examiner did not receive Applicants' Information Disclosure Statement which was, in fact, filed along with a copy of each of the references when the application was filed. Enclosed with this Amendment is a copy of the Information Disclosure Statement (without the references that were previously provided to the Office) that was filed December 13, 2001. Applicants do not see the need to submit a second Information Disclosure Statement and a second set of references.

Drawings:

The drawings have been objected to because the drawings allegedly do not show the "lines" recited in the claims.

The Examiner is directed to Applicants' specification at page 10, lines 2 -6, wherein it is noted that top and bottom portions 18, 20 are formed by screened lines. The Examiner is also directed to the description of Figures 7A, 7B and 7C on page 13, lines 3-16 of Applicants' specification wherein wiring lines are noted. Accordingly, correction of the drawings does not appear to be required.

Claim objections:

The Examiner has objected to claims 5 and 6 because there is allegedly no antecedent basis for "the ends" and "the length".

Although it is felt that amendment of claims 5 and 6 is not necessary because lines inherently have "ends" and "length", the claims have nevertheless been amended to move along the prosecution of this application.

The §112 rejections:

Claims 2 to 6 and 9 have been rejected by the Examiner under 35 USC §112, second paragraph, as being indefinite.

Regarding claim 2, the Examiner states that the wording is ambiguous. The Examiner then asks: "Does the applicant mean that the top and bottom portions comprise lines or the dielectric body comprises the lines?"

Claim 2 clearly states that "the top and bottom portions comprise wiring lines" (as amended). There does not appear to be an ambiguity or an indefiniteness in claim 2.

Regarding claim 3, the Examiner asks: "What 'two parallel lines' is the applicant talking about?"

The two parallel lines are those shown, for example, in Figure 3. It can be seen that each of the top and bottom portions (i.e., 18 and 20) comprise two parallel lines in juxtaposition (i.e., 18A, 18B and 20A, 20B). There does not appear to be an ambiguity or an indefiniteness in claim 3.

Regarding claim 9, the Examiner was unclear as to what "deleting a portion of the multiturn inductor" means.

Contrary to what the Examiner understands, Applicants' specification at page 16, lines 17-18 describes deletion of a portion of the inductor and shows this in Figure 12B. There does not

appear to be any ambiguity or indefiniteness in claim 9.

In view of the preceding remarks, it is respectfully requested that the rejection of claims 2 to 6 and 9 under 35 USC §112, second paragraph, be withdrawn.

The §102 rejections:

Claims 1 to 6, 8, 10 and 13 have been rejected by the Examiner under 35 USC §102(e) as being unpatentable over Liu et al. U.S. Patent 6,459,352 (hereafter "Liu").

Claim 1 has been amended to recite that "the top and bottom portions have a lower crosssectional area than the side portions." Such a relationship is clear from, for example, claim 1. There is support for this limitation on page 11, lines 18-24 of Applicants' specification.

Liu discloses in Figure 1 that the top and bottom portions all have the same crosssectional area. In Figures 2B and 2C, it can be seen that the top, bottom and side portions are formed by a damascene process in trenches and they all have the same crosssectional area. Accordingly, Liu cannot anticipate Applicants' claim 1.

Inasmuch as claims 2 to 6, 8, 10 and 13 depend, directly or indirectly, from claim 1, and since claim 1 is believed to be allowable, then claims 2 to 6, 8, 10 and 13 should be allowable as well.

In addition, claims 3 to 6 are believed to be independently patentable as well. All of these claims 3 to 6 recite, in one form or another, that the top and bottom portions each comprise two parallel wiring lines in juxtaposition. Applicants teach that these parallel wiring lines are important to lowering the resistance of the top and bottom portions and creating higher Q values for the inductor. These are the embodiments shown in Figures 3 to 5. Liu only shows top portions having

a single wiring line. Accordingly, Liu cannot anticipate Applicants' claims 3 to 6.

The §103 rejections:

Claim 7 has been rejected by the Examiner under 35 USC §103(a) as being unpatentable over Liu in view of Burghartz et al. U.S. Patent 5,884,990 .

Inasmuch as claim 7 depends from claim 1, and since claim 1 is believed to be allowable, then claim 7 should be allowable as well. No independent ground of patentability is asserted for claim 7 at this time.

Claim 9 has been rejected by the Examiner under 35 USC §103(a) as being unpatentable over Liu.

Inasmuch as claim 9 depends indirectly from claim 1, and since claim 1 is believed to be allowable, then claim 9 should be allowable as well. In addition, claim 9 is believed to be independently patentable as well. Claim 9 recites "deletion of a portion of the multiturn inductor so as to tune the multiturn inductor." The Examiner states that it would have been obvious "to utilize the teachings of Liu, et al, and incorporate a way of decreasing the size of the inductor within the dielectric are in order to increase the inductance. (Column 3, lines 1-3)."

The indicated portion of Liu (column 3, lines 1-3) says nothing of decreasing the size of the inductor or tuning the inductor. Rather, it refers to the prior art problems of inductors that are too large for on-chip transformers. Moreover, the Examiner indicates that it would have been obvious to "incorporate a way of decreasing the size of the inductor". [emphasis added]. A person skilled in the art is left to wonder what that "way" is for decreasing the size of the inductor. As such, there is no basis in Liu for teaching Applicants' feature of "deletion of a portion of the multiturn inductor so as to tune the multiturn inductor." Therefore, the Examiner has not made

out a prima facie case of obviousness with respect to claim 9.

Claims 11 and 12 have been rejected by the Examiner under 35 USC §103(a) as being unpatentable over Liu in view of Eberhardt U.S. Patent 5,461,353.

Inasmuch as claims 11 and 12 depend from claim 1, and since claim 1 is believed to be allowable, then claims 11 and 12 should be allowable as well. No independent ground of patentability is asserted for claims 11 and 12 at this time.

New claims 21 to 23:

New claims 21 and 22 build on the new limitation cited in claim 1. It is made clear in claims 21 and 22 that the top and bottom portions are planar and that these planar portions join a circular contact surface of the side portions. Such a structural relationship is not shown in Liu.

New claim 23 is similar to claims 3 to 6 and should be patentable for the same reasons. In addition, claim 23 recites that the parallel lines of the top and bottom portions are of unequal length. This is the embodiment shown in Figure 5. As Liu does not disclose top and bottom portions having two parallel lines, Liu cannot disclose that these parallel lines are of unequal length.

Summary:

In view of all of the preceding remarks, it is submitted that this application is in condition for allowance. If the Examiner finds this application deficient in any respect, the Examiner is

invited to telephone the undersigned at the Examiner's earliest convenience to resolve such deficiency.

Respectfully submitted,
David C. Long, et al.

By:



Ira D. Blecker, Attorney
Registration No. 29,894
Telephone: (845) 894-2580